Patent Attorney Docket No. 89003-11

III. REMARKS

A. Summary of the Amendments

The present application now contains 42 claims.

Claims 1, 12, 14, 22, 28, 29, 38 have been amended in order to clarify the subject matter being claimed.

Claims 6, 17, 18, 34 have been amended to correct typographical errors, to amend the claim dependency or for other reasons unrelated to patentability.

Claims 5, 33 have been cancelled without prejudice.

Claims 2-4, 7-11, 13, 15, 16, 19-21, 23-27, 30-32, 35-37 remain the same.

Claims 39-44 are new. The Applicant respectfully submits that support for new claims 39-44 exists in the application as filed and that no new matter has been added to the present application. More specifically, support for new claims 39-44 can be found throughout the specification and more particularly on p. 23 lines 9-14; p.25 line 24 to p. 26 line 28 and figures 2, 5a-5h.

B Summary of the Rejections and Reply

Specification

In the Office Action, the Examiner has objected to the specification and has indicated that the title of the invention is not descriptive. The applicant respectfully disagrees with the examiner and submits that the title "BATHING UNIT CONTROLLER AND CONNECTOR SYSTEM THEREFORE" satisfies the formal requirements.

Patent Attorney Docket No. 89003-11

MPEP 606 indicates that the title should be brief but technically accurate and descriptive and should contain fewer than 500 characters. The applicant is of the view that the present title satisfies these requirements. More specifically, the claims of the present invention are directed either to a bathing unit controller (claims 1-11, 14-21, 38-44), a connector system for a bathing unit controller (claims 12-14, 22-27), a bathing unit component for use in a bathing unit having a bathing unit controller (claim 28) or to a bathing unit system having a combination comprising a bathing unit controller (claims 29-37). As such, the applicant is of the view that the present title "BATHING UNIT CONTROLLER AND CONNECTOR SYSTEM THEREFORE" is technically accurate and descriptive and is appropriate to the present application.

If the examiner continues to be of the view that the title is not satisfactory, the applicant would gratefully appreciate the examiner's suggestions for overcoming this objection.

Claim rejection - 35 U.S.C. §112

In the Office Action, the examiner rejected claims 29-37 under 35 U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, the examiner indicates that claim 29 recites a combination but does not describe what the invention is.

Claim 29 has been amended and is now directed to a bathing unit system. The applicant respectfully submits that claim 29 as amended satisfies the requirements of 35 U.S.C. §112. Claims 30-37 depend from claim 29. As such, the applicant submits that claims 31-37 also satisfy the requirements of 35 U.S.C. §112.

Patent Attorney Docket No. 89003-11

Claim rejection - 35 U.S.C. \$102 and 35 U.S.C. \$103

In the Office Action, the examiner rejected claims 1-9, 12-22 and 26-38 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent no. 5,245,221 (hereafter to be referred to as Schmidt et al.).

In the Office Action, the Examiner has rejected claims 10-11 under 35 U.S.C. §103(a) as being unpatentable over Schmidt et al.

For the reasons presented below, the Applicant respectfully submits that the claims, as amended, are novel and non-obvious in light of the teachings of the cited documents.

Claims 1-11

The Examiner's attention is respectfully directed towards the following limitation of independent claim 1, as amended:

- 1. A controller suitable for use in controlling components in a bathing unit, said controller comprising:
 - a. a controller body;
 - b. a plurality of connectors positioned on said controller body, each connector in said plurality of connectors being adapted for providing electrical power to a respective bathing unit component, each connector of said plurality of connectors being adapted for matingly engaging a complementary connector associated to a respective bathing unit component, each connector in said plurality of connectors including:
 - a set of contact elements arranged in a common configuration, wherein.
 - a first subset of said set of contact elements is adapted for generating a power signal characterized by a first currentvoltage combination; and
 - 2. a second subset of said set of contact elements is adapted for generating a power signal characterized by second current-voltage combination;
 - c. a control circuit positioned within said controller body, in use said control circuit being adapted for selectively providing electrical power to respective bathing unit components through the plurality of connectors.

The Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the subject matter of independent claim 1. Without limiting

Patent Attorney Docket No. 89003-11

the generality of the foregoing, the Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the above-emphasized limitations of independent claim 1.

Firstly, the applicant submits that Schmidt et al. fails to teach or suggest "a plurality of connectors positioned on said controller body, each connector in said plurality of connectors being adapted for providing electrical power to a respective bathing unit component [...]". In the office action, on p. 2, the Examiner indicates that the plurality of connectors, described in claim 1, corresponds to elements 28', 29' and 30' as shown in figure 2A of Schmidt et al. The applicant respectfully disagrees and submits that elements 28', 29' and 30' are not adapted for providing electrical power to bathing unit components.

The applicant submits that the purpose of the system described in Schmidt et al. is to provide a modular and expandable control system, which can be modified by installing additional functions by merely adding one or more additional auxiliary control circuits to a main control board. In Schmidt et al., elements 28', 29' and 30' provide for a connection interface between a main control board 27 and a set of auxiliary control circuits 24, 25 and 26 having complementary interfaces 28, 29 and 30. As described in column 3 lines 35-40, "[...] the main control circuit board is capable of receiving one or more auxiliary control circuit boards and to establish an interface therebetween so as to provide auxiliary control function capabilities to other function providing operating units installed to the jetted tub."

The electrical interconnections between the main control board 27 and the set of auxiliary control circuits 24, 25 and 26 is of a low voltage type and provide power to the control circuits mounted on the auxiliary control circuits 24, 25 and 26. As such, the elements 28', 29' and 30' do not provide electrical power to bathing unit components rather they provide power of a low voltage type to the electronic circuitry mounted on the auxiliary control circuits 24, 25 and 26. This is described in column 8 lines 28-31 reproduced below for the examiner's convenience "Notably, for all

Patent Attorney Docket No. 89003-11

auxiliary control boards, electric power required to energize control circuitry thereof is supplied from the main control board 27 by way of the multipin connector interfaces."

As such, the elements 28', 29' and 30' as shown in figure 2A of Schmidt et al. are not "adapted for providing electrical power to a respective bathing unit component [...]" and therefore the feature of claim 1 which reads "a plurality of connectors positioned on said controller body, each connector in said plurality of connectors being adapted for providing electrical power to a respective bathing unit component [...]" is not satisfied.

Secondly, the applicant submits that Schmidt et al. fails to teach or suggest "each connector of said plurality of connectors being adapted for matingly engaging a complementary connector associated to a respective bathing unit component, [...]". In Schmidt et al. power is supplied to bathing unit components through the terminal board 34, which is mounted in the high voltage compartment 32 of the control box 8 (see column 7 lines 18-40). The electrical coupling between the terminal board 34 and the bathing unit components is effected through terminal connectors 38, 39 and 40 (see figure 5). Nowhere in Schmidt et al. is it taught or suggested to have connectors adapted for matingly engaging a complementary connector associated to a respective bathing unit components. As such, the applicant submits that the feature of claim 1 which reads "each connector of said plurality of connectors being adapted for matingly engaging a complementary connector associated to a respective bathing unit component, [...]" is neither taught nor suggested by Schmidt et al.

Thirdly, the applicant submits that Schmidt et al. fails to teach or suggest a connector having:

"a set of contact elements arranged in a common configuration, wherein;

1. a first subset of said set of contact elements is adapted for generating a

power signal characterized by a first current-voltage combination; and

Patent Attorney Docket No. 89003-11

 a second subset of said set of contact elements is adapted for generating a power signal characterized by second current-voltage combination;"

Nowhere in Schmidt et al. is the above feature taught or suggested. On page 2 of the office action, the Examiner appear to rely on figures 1-9 to support his argument that this limitation is taught by Schmidt et al. The Applicant disagrees that there is anything in this figures which teaches the above features. As stated above, elements 28', 29' and 30' are not adapted for providing electrical power to bathing unit components. In addition, nowhere is it indicated that terminal connectors 38, 39 and 40 (shown figure 5 of Schmidt et al.) have the above-described features. If the Examiner continues to be of the view that the above features are present in Schmidt et al. he is respectfully requested to indicate where such a feature is present.

Finally, the applicant submits that Schmidt et al. fails to teach or suggest a "control circuit being adapted for selectively providing electrical power to respective bathing unit components through the plurality of connectors." As stated above, the applicant respectfully submits that in Schmidt et al. electrical power is not provided to bathing unit components through elements 28', 29' and 30'. As such, the applicant submits that Schmidt et al. neither teaches nor suggests this feature of claim 1.

In light of the foregoing, the Applicant respectfully submits that independent claim 1, as amended, distinguishes over the cited art, and as such is believed to be in condition for allowance.

Claims 2-11 depend directly or indirectly from independent claim 1, and as such incorporate by reference all the limitations contained therein. Accordingly, for the same reasons as those presented above with respect to independent claim 1, claims 2-11 also distinguish over the cited art, and as such are also believed to be in condition for allowance.

Patent Attorney Docket No. 89003-11

Claims 12-13

The Examiner's attention is respectfully directed towards the following limitation of independent claim 12, as amended:

- 12. A connector suitable for use in a bathing unit controller for providing electrical power to a bathing unit component, said connector including a set of contact elements, wherein;
 - a. a first subset of said set of contact elements is adapted for generating a power signal characterized by a first current-voltage combination; and
 - b. a second subset of said set of contact elements is adapted for generating a power signal characterized by second current-voltage combination; said connector being adapted for matingly engaging a complementary connector associated to a bathing unit component, when said connector is in use in a bathing unit controller, said connector providing power to the bathing unit component associated to the complementary connector.

The Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the subject matter of independent claim 12. Without limiting the generality of the foregoing, the Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the above-emphasized limitations of independent claim 12.

Firstly, the applicant submits that Schmidt et al. fails to teach or suggest "said connector being adapted for matingly engaging a complementary connector associated to a bathing unit component,[...]". In Schmidt et al. power is supplied to bathing unit components through the terminal board 34, which is mounted in the high voltage compartment 32 of the control box 8 (see column 7 lines 18-40). The electrical coupling between the terminal board 34 and the bathing unit components is effected through terminal connectors 38, 39 and 40 (see figure 5). Nowhere in Schmidt et al. is it taught or suggested to have connectors adapted for matingly engaging a complementary connector associated to a respective bathing unit component where the connectors are adapted for providing electrical power to the respective bathing unit components. As such, the applicant submits that Schmidt et al. neither teaches nor suggests this feature of claim 12.

Patent Attorney Docket No. 89003-11

Secondly, the applicant submits that Schmidt et al. fails to teach or suggest a connector having:

"a set of contact elements, wherein;

- a. a first subset of said set of contact elements is adapted for generating a power signal characterized by a first current-voltage combination; and
- b. a second subset of said set of contact elements is adapted for generating a power signal characterized by second current-voltage combination;"

Nowhere in Schmidt et al. is the above feature taught or suggested. On page 2 of the office action, the Examiner refers to figures 1-9 in support of his position that this limitation is taught by Schmidt et al. The Applicant disagrees that there is anything in these figures which teaches the above features. As stated above with reference to claim 1, elements 28', 29' and 30' are not adapted for providing electrical power to bathing unit components. In addition, nowhere is it indicated that terminal connectors 38, 39 and 40 (shown figure 5 of Schmidt et al.) have the above-described features. If the Examiner continues to be of the view that the above features are present in Schmidt et al. he is respectfully requested to indicate where such a feature is present.

Finally, the applicant submits that Schmidt et al. fails to teach or suggest "when said connector is in use in a bathing unit controller, said connector providing power to the bathing unit component associated to the complementary connector." As stated above, the applicant respectfully submits that in Schmidt et al. electrical power is not provided to bathing unit components through elements 28', 29' and 30'. As such, the applicant submits that Schmidt et al. neither teaches nor suggests this feature of claim 12.

In light of the foregoing, the Applicant respectfully submits that independent claim 12, as amended, distinguishes over the cited art, and as such is believed to be in condition for allowance.

Claim 13 depends directly from independent claim 12, and as such incorporates by reference all the limitations contained therein. Accordingly, for the same reasons as

Patent Attorney Docket No. 89003-11

those presented above with respect to independent claim 12, claim 13 also distinguishes over the cited art, and as such is also believed to be in condition for allowance.

Claims 14-21

The Examiner's attention is respectfully directed towards the following limitation of independent claim 14, as amended:

14. A controller suitable for use in controlling components in a bathing unit, said controller comprising:

a. a controller body;

b. a plurality of connectors positioned on said controller body for supplying electrical power to a set of bathing unit components;

c. a plurality of key members adapted to be connected to respective connectors in the plurality of connectors, the plurality of connectors allowing bathing unit components having complementary key members to be connected to connectors having key members matching the complementary key members;

d. a control circuit positioned within said controller body, in use said control circuit being adapted for selectively providing electrical power to respective bathing unit components through the plurality of connectors.

The Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the subject matter of independent claim 14. Without limiting the generality of the foregoing, the Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the above-emphasized limitations of independent claim 14.

Firstly, the applicant submits that Schmidt et al. fails to teach or suggest "a plurality of connectors positioned on said controller body for supplying electrical power to a set of bathing unit components". In the office action, on p. 2, the Examiner indicates that the plurality of connectors corresponds to elements 28', 29' and 30' as shown in figure 2A of Schmidt et al. The applicant respectfully disagrees and submits that, for the same reasons as those set forth in connected with claim 1, elements 28', 29' and

Patent Attorney Docket No. 89003-11

30' are not adapted for providing electrical power to bathing unit components.

Secondly, the applicant submits that Schmidt et al. fails to teach or suggest "a plurality of key members adapted to be connected to respective connectors in the plurality of connectors, the plurality of connectors allowing bathing unit components having complementary key members to be connected to connectors having key members matching the complementary key members". In Schmidt et al. power is supplied to bathing unit components through the terminal board 34, which is mounted in the high voltage compartment 32 of the control box 8 (see column 7 lines 18-40). The electrical coupling between the terminal board 34 and the bathing unit components is effected through terminal connectors 38, 39 and 40 (see figure 5). Nowhere in Schmidt et al. is it taught or suggested to have key members adapted to be connected to connectors where the connectors are adapted for providing electrical power to the respective bathing unit components. As such, the applicant submits that Schmidt et al. neither teaches nor suggests this feature of claim 14.

In light of the foregoing, the Applicant respectfully submits that independent claim 14, as amended, distinguishes over the cited art, and as such is believed to be in condition for allowance.

Claims 15-21 depend directly or indirectly from independent claim 14, and as such incorporate by reference all the limitations contained therein. Accordingly, for the same reasons as those presented above with respect to independent claim 14, claims 15-21 also distinguish over the cited art, and as such are also believed to be in condition for allowance.

Claims 22-27

The Examiner's attention is respectfully directed towards the following limitation of independent claim 22, as amended:

Patent Attorney Docket No. 89003-11

- 22. A keying system suitable for use in a bathing unit controller, the bathing unit controller including a connector adapted for providing electrical power to a bathing unit component, the bathing unit component including an electrical plug, said keying system comprising:
 - a. a key member adapted for engaging the connector;
 - b. a complementary key member adapted for engaging the electrical plug, so as to enable the electrical plug and the connector to establish an electrical connection when the key member and the complementary key member match such as to allow the connector to provide power to the bathing unit component through the electrical plug.

The Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the subject matter of independent claim 22. Without limiting the generality of the foregoing, the Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the above-emphasized limitations of independent claim 22.

The applicant submits that Schmidt et al. fails to teach or suggest key members and complementary key members as described in claim 22. Nowhere in Schmidt et al. is there a complementary key member adapted for engaging an electrical plug such as to allow the connector to establish an electrical connection when the key member and the complementary key member match in order to provide power to the bathing unit component through the electrical plug.

In Schmidt et al. power is supplied to bathing unit components through the terminal board 34, which is mounted in the high voltage compartment 32 of the control box 8 (see column 7 lines 18-40). The electrical coupling between the terminal board 34 and the bathing unit components is effected through terminal connectors 38, 39 and 40 (see figure 5). Nowhere in Schmidt et al. is it taught or suggested to use a keying system of any sort between an electrical plug associated to bathing unit component and a connector through which power is provided.

In light of the foregoing, the Applicant respectfully submits that independent claim 22, as amended, distinguishes over the cited art, and as such is believed to be in

Patent Attorney Docket No. 89003-11

condition for allowance.

Claims 23-27 depend directly or indirectly from independent claim 22, and as such incorporate by reference all the limitations contained therein. Accordingly, for the same reasons as those presented above with respect to independent claim 22, claims 23-27 also distinguish over the cited art, and as such are also believed to be in condition for allowance.

Claim 28

The Examiner's attention is respectfully directed towards the following limitation of independent claim 28, as amended:

28. A bathing unit component suitable for use in a bathing unit having a controller, the controller comprising a plurality of connectors for supplying electrical power, said bathing unit component comprising a plug member having a complementary key member connected to said plug member so as to allow the bathing unit component to be connected to a connector on the controller having a matching key for providing power to the bathing unit component through the plug member.

The Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the subject matter of independent claim 28. Without limiting the generality of the foregoing, the Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the above-emphasized limitations of independent claim 28.

The applicant submits that Schmidt et al. fails to teach or suggest a bathing unit component having a plug member having a complementary key member connected thereto as described in claim 28. Nowhere in Schmidt et al. is there a complementary key member adapted for engaging a plug member. Moreover, nowhere in Schmidt et al. is the connector allowed to establish an electrical connection with the plug member when the key member and the complementary key member match in order to provide power to the bathing unit component through the plug member.

Patent Attorney Docket No. 89003-11

In Schmidt et al. power is supplied to bathing unit components through the terminal board 34, which is mounted in the high voltage compartment 32 of the control box 8 (see column 7 lines 18-40). The electrical coupling between the terminal board 34 and the bathing unit components is effected through terminal connectors 38, 39 and 40 (see figure 5). Nowhere in Schmidt et al. is it taught or suggested to have a keying system of any sort between a plug associated to bathing unit component and a connector through which power is provided.

In light of the foregoing, the Applicant respectfully submits that independent claim 28, as amended, distinguishes over the cited art, and as such is believed to be in condition for allowance.

Claims 29-37

The Examiner's attention is respectfully directed towards the following limitation of independent claim 29, as amended:

29. A bathing unit system comprising in combination:

- a. a controller suitable for use in controlling components in a bathing unit, said controller comprising:
 - i. a controller body;
 - it. a plurality of connectors positioned on said controller body, each connector in said plurality of connectors being adapted for providing electrical power to a respective bathing unit component, each connector of said plurality of connectors being adapted for matingly engaging a complementary connector associated to a respective bathing unit component, each connector in said plurality of connectors including:
 - a set of contact elements arranged in a common configuration, wherein:
 - a. a first subset of said set of contact elements is adapted for generating a power signal characterized by a first current-voltage combination; and
 - b. a second subset of said set of contact elements is adapted for generating a power signal characterized by second current-voltage combination;

Patent Attorney Docket No. 89003-11

- iii. a control circuit positioned within said controller body, in use said control circuit being adapted for controlling a supply of electrical power to respective bathing unit components through the plurality of connectors;
- b. a plurality of bathing unit components adapted to engage respective ones of the plurality of connectors.

The Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the subject matter of independent claim 29. Without limiting the generality of the foregoing, the Applicant respectfully submits that, for the same reasons as those set forth with respect to claim 1, the references cited by the Examiner do not disclose, teach or suggest the above-emphasized limitations of independent claim 29.

In light of the foregoing, the Applicant respectfully submits that independent claim 29, as amended, distinguishes over the cited art, and as such is believed to be in condition for allowance.

Claims 30-37 depend directly or indirectly from independent claim 29, and as such incorporate by reference all the limitations contained therein. Accordingly, for the same reasons as those presented above with respect to independent claim 29, claims 30-37 also distinguish over the cited art, and as such are also believed to be in condition for allowance.

Claim 38

The Examiner's attention is respectfully directed towards the following limitation of independent claim 38, as amended:

- 38. A controller suitable for use in controlling components in a bathing unit, said controller comprising:
 - a. a controller body;
 - b. a plurality of connector means positioned on said controller body for supplying electrical power to a set of bathing unit components;
 - c. a plurality of key means connected to respective connector means in the plurality of connector means so as to allow bathing unit components

Patent Attorney Docket No. 89003-11

having complementary key members to be connected to connector means having key means matching the complementary key members;

d. control circuit means positioned within said controller body, in use said control circuit means being adapted for selectively providing electrical power to respective bathing unit components through the plurality of connectors means.

The Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the subject matter of independent claim 38. Claim 38 corresponds substantially to claim 14 written in means plus function language. Without limiting the generality of the foregoing, the Applicant respectfully submits that, for the same reasons as those set forth with respect to claim 14, the references cited by the Examiner do not disclose, teach or suggest the above-emphasized limitations of independent claim 38.

In light of the foregoing, the Applicant respectfully submits that independent claim 38, as amended, distinguishes over the cited art, and as such is believed to be in condition for allowance.

Claims 39-44

New independent claim 39 reads as follows:

- 39. A controller for use in controlling bathing unit components in a bathing unit system, said controller comprising:
 - a. a controller body;
 - b. a plurality of connector interfaces positioned on said controller body, each connector interface of said plurality of connector interfaces being adapted for matingly engaging a complementary connector associated to a respective bathing unit component, at least some connector interfaces of said plurality of connector interfaces including descriptive indicia, the descriptive indicia providing guidance in locating corresponding complementary connectors associated to bathing unit components;
 - c. a control circuit positioned within said controller body, in use said control circuit being adapted for selectively providing electrical power to respective bathing unit components through the plurality of connector interfaces.

Patent Attorney Docket No. 89003-11

The Applicant respectfully submits that the references cited by the Examiner do not disclose, teach or suggest the subject matter of independent claim 39. Without limiting the generality of the foregoing, the Applicant respectfully submits that, the references cited by the Examiner do not disclose, teach or suggest the above-emphasized limitations of independent claim 39.

In light of the foregoing, the Applicant respectfully submits that independent claim 39, as amended, distinguishes over the cited art, and as such is believed to be in condition for allowance.

Claims 40-44 depend directly or indirectly from independent claim 39, and as such incorporate by reference all the limitations contained therein. Accordingly, for the same reasons as those presented above with respect to independent claim 39, claims 40-44 also distinguish over the cited art, and as such are also believed to be in condition for allowance.

Patent Attorney Docket No. 89003-11

III. CONCLUSION

In view of the above, it is respectfully submitted that claims 1-4, 6-32, 34-44 are in condition for allowance. Reconsideration of the rejections and objections with regards to claims 1-4, 6-32, 34-44 is requested. Allowance of claims 1-4, 6-32, 34-44 at an early date is solicited.

If the claims of the application are not considered to be in full condition for allowance, for any reason, the Applicant respectfully requests the constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims or in making constructive suggestions so that the application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Respectfully submitted,

Date: February 25, 2005

Brigide Mattar Reg No. 51,284

SMART & BIGGAR 1000 de la Gauchetière Street West Suite 3300 Montreal, Quebec H3B 4W5 CANADA

Tel.: 514-954-1500 Fax: 514-954-1396